

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 and 2 (canceled)

3. (currently amended) A liquid crystal display apparatus comprising:

a liquid crystal panel including a pair of polarizers; and

a back light source provided on a surface at a back side of said liquid crystal panel;

wherein said liquid crystal panel is displayed an active matrix type liquid crystal panel enabling display in a double refraction mode, and has a characteristic of spectral transmittance required to satisfy the following equation, $x > y > z$, when a drive voltage is applied thereto, so as to vary in the range of a minimum voltage required for a visual display on said liquid crystal panel to a maximum voltage, where:

"x" ~~equals~~ is a value of the transmittance in said liquid crystal panel at a wavelength which corresponds to a longest wavelength in the range of wavelengths designated for blue light illuminated from said light source;

"y" ~~equals~~ is a value of the transmittance in said liquid crystal panel at a wavelength which corresponds to a maximum value of the intensity in the range of wavelengths designated for green light illuminated from said light source; and

"z" ~~equals~~ is a value of the transmittance in said liquid crystal panel at a wavelength which corresponds to a maximum value of the intensity in the range of wavelengths designated for red light illuminated from said light source.

4. (previously presented) A liquid crystal display apparatus according to claim 3, wherein the range of wavelengths designated for blue light illuminated from said light source corresponds to 400 nm to 500 nm, the range of wavelengths designated for green light illuminated from said light source corresponds to 500 nm to 600 nm, and the range of wavelengths designated for red light illuminated from said light source corresponds to 600 nm to 700nm.

5. (currently amended) A liquid crystal display apparatus according to claim 3, ~~further comprising wherein:~~

a said pair of polarizers is arranged so as to sandwich a pair of substrates in said liquid crystal panel; and

a birefringent film is arranged between a polarizer and a substrate.

6. (previously presented) A liquid crystal display apparatus according to claim 5, further comprising a plurality of electrodes provided on at least one of said pair of substrates in said liquid crystal panel to produce an electric field substantially in parallel with surfaces of said pair of substrates.

7. (currently amended) A liquid crystal display apparatus comprising:

a liquid crystal panel including a pair of polarizers; and

a ~~back~~ light source ~~provided on a surface at a back side~~ of said liquid crystal panel;

wherein said liquid crystal panel is ~~displayed~~ an active matrix type liquid crystal panel enabling display in a double refraction mode, and has a characteristic of spectral transmittance required to satisfy the following equation, $x > y > z$, when a drive voltage is applied thereto, so as to vary from a dark state to a light state, where:

“x” ~~equals~~ is a value of the transmittance in said liquid crystal panel at a wavelength which corresponds to a longest wavelength in the range of wavelengths designated for blue light illuminated from said light source;

“y” ~~equals~~ is a value of the transmittance in said liquid crystal panel at a wavelength which corresponds to a maximum value of the intensity in the range of wavelengths designated for green light illuminated from said light source; and

“z” ~~equals~~ is a value of the transmittance in said liquid crystal panel at a wavelength which corresponds to a maximum value of the intensity in the range of wavelengths designated for red light illuminated from said light source.

8. (previously presented) A liquid crystal display apparatus according to claim 7, wherein the range of wavelengths designated for blue light illuminated from said light source corresponds to 400 nm to 500 nm, the range of wavelengths designated for green light illuminated from said light source corresponds to 500 nm to 600 nm, and the range of wavelengths designated for red light illuminated from said light source corresponds to 600 nm to 700nm.

9. (currently amended) A liquid crystal display apparatus according to claim 7, further comprising wherein:

a said pair of polarizers is arranged so as to sandwich a pair of substrates in said liquid crystal panel; and

a birefringent film is arranged between a polarizer and a substrate.

10. (previously presented) A liquid crystal display apparatus according to claim 9, further comprising a plurality of electrodes provided on at least one of said pair of substrates in said liquid crystal panel to produce an electric field substantially in parallel with surfaces of said pair of substrates.

11. (currently amended) A liquid crystal display apparatus comprising:

a liquid crystal panel including a pair of polarizers; and

a back light source ~~provided on a surface at a back side~~ of said liquid crystal panel,

wherein said liquid crystal panel is ~~displayed~~ an active matrix type liquid crystal panel enabling display in a double refraction mode, and has a characteristic of spectral transmittance required to satisfy the following equation, $x > z$, when a drive voltage is applied thereto so as to vary in the range of a minimum voltage required for a visual display on said liquid crystal panel to a maximum voltage, where:

"x" ~~equals~~ is a value of the transmittance in said liquid crystal panel at a wavelength which corresponds to a longest wavelength in the range of wavelengths designated for blue light illuminated from said light source; and

"Z" ~~equals~~ is a value of the transmittance in said liquid crystal panel at a wavelength which corresponds to a maximum value of the intensity in the range of wavelengths designated for red light illuminated from said light source.

12. (previously presented) A liquid crystal display apparatus according to claim 11, wherein the range of wavelengths designated for blue light illuminated from said light source corresponds to 400 nm to 500 nm, and the range of wavelengths designated for red light illuminated from said light source corresponds to 600 nm to 700nm.

13. (currently amended) A liquid crystal display apparatus according to claim 11, ~~further comprising wherein:~~

a ~~said~~ pair of polarizers is arranged so as to sandwich a pair of substrates in said liquid crystal panel; and

a birefringent film is arranged between a polarizer and a substrate.

14. (previously presented) A liquid crystal display apparatus according to claim 13, further comprising a plurality of electrodes provided on at least one of said pair of substrates in said liquid crystal panel to produce an electric field substantially in parallel with surfaces of said pair of substrates.

15. (currently amended) A liquid crystal display apparatus comprising:

a liquid crystal panel including a pair of polarizers; and

a back light source provided on a surface at a back side of said liquid crystal panel;

wherein said liquid crystal panel is ~~displayed~~ an active matrix type liquid crystal panel enabling display in a double refraction mode, and has a characteristic of spectral transmittance required to satisfy the following equation, $x > z$, when a drive voltage is applied thereto, so as to vary from a dark state to a light state, where:

"x" ~~equals~~ is a value of the transmittance in said liquid crystal panel at a wavelength which corresponds to a longest wavelength in the range of wavelengths designated for blue light illuminated from said light source; and

"z" ~~equals~~ is a value of the transmittance in said liquid crystal panel at a wavelength which corresponds to a maximum value of the intensity in the range of wavelengths designated for red light illuminated from said light source.

16. (previously presented) A liquid crystal display apparatus according to claim 15, wherein the range of wavelengths designated for blue light illuminated from said light source corresponds to 400 nm to 500 nm, and the range of wavelengths designated for red light illuminated from said light source corresponds to 600 nm to 700nm.

17. (currently amended) A liquid crystal display apparatus according to claim 15, ~~further comprising wherein:~~

~~a~~ said pair of polarizers is arranged so as to sandwich a pair of substrates in said liquid crystal panel; and

a birefringent film is arranged between a polarizer and a substrate.

18. (previously presented) A liquid crystal display apparatus according to claim 17, further comprising a plurality of electrodes provided on at least one of said pair of substrates in said liquid crystal panel to produce an electric field substantially in parallel with surfaces of said pair of substrates.

Claims 19 and 20 (canceled)

21. (new) A liquid crystal display apparatus comprising:

a liquid crystal panel including a pair of polarizers; and

a back light provided at a back side of said liquid crystal panel;

wherein said liquid crystal panel is an active matrix type liquid crystal panel enabling display in a double refraction mode, and has a characteristic of spectral transmittance required to satisfy the following equation, $x > y > z$, when a drive voltage is applied thereto so as to vary from a dark state to a light state, where:

“x” is a value of the transmittance in said liquid crystal panel at a wavelength which corresponds to one of 490nm and 500nm;

“y” is a value of the transmittance in said liquid crystal panel at a wavelength which corresponds to 545nm; and

“z” is a value of the transmittance in said liquid crystal panel at a wavelength which corresponds to 630nm.

22. (new) A liquid crystal display apparatus according to claim 21, wherein “x” is a value of the transmittance in said liquid crystal panel at a wavelength which corresponds to 490nm.

23. (new) A liquid crystal display apparatus according to claim 21, wherein "x" is a value of the transmittance in said liquid crystal panel at a wavelength which corresponds to 500nm.

24. (new) A liquid crystal display apparatus according to claim 21, wherein:
said pair of polarizers is arranged so as to sandwich a pair of substrates in said liquid crystal panel; and
a birefringent film is arranged between a polarizer and a substrate.

25. (new) A liquid crystal display apparatus according to claim 24, further comprising a plurality of electrodes provided on at least one of said pair of substrates in said liquid crystal panel to produce an electric field substantially in parallel with surfaces of said pair of substrates.

26. (new) A liquid crystal display apparatus comprising:
a liquid crystal panel including a pair of polarizers; and
a back light provided at a back side of said liquid crystal panel;
wherein said liquid crystal panel is an active matrix type liquid crystal panel, and has a characteristic of spectral transmittance required to satisfy the following equation, $x > y > z$, when a drive voltage is applied thereto so as to vary from a dark state to a light state, where:

"x" is a value of the transmittance in said liquid crystal panel at a wavelength which corresponds to a longest wavelength in the range of wavelengths designated for blue light illuminated from said light source;

“y” is a value of the transmittance in said liquid crystal panel at a wavelength which corresponds to a maximum value of the intensity in the range of wavelengths designated for green light illuminated from said light source; and

“z” is a value of the transmittance in said liquid crystal panel at a wavelength which corresponds to a maximum value of the intensity in the range of wavelengths designated for red light illuminated from said light source.

27. (new) A liquid crystal display apparatus according to claim 26, wherein the range of wavelengths designated for blue light illuminated from said light source corresponds to 400 nm to 500 nm, the range of wavelengths designated for green light illuminated from said light source corresponds to 500 nm to 600 nm, and the range of wavelengths designated for red light illuminated from said light source corresponds to 600 nm to 700nm.

28. (new) A liquid crystal display apparatus according to claim 26, wherein:
said pair of polarizers is arranged so as to sandwich a pair of substrates in said liquid crystal panel; and
a birefringence film is arranged between a polarizer and a substrate.

29. (new) A liquid crystal display apparatus according to claim 28, further comprising a plurality of electrodes provided on at least one of said pair of substrates in said liquid crystal panel to produce an electric field substantially in parallel with surfaces of said pair of substrates.

30. (new) A liquid crystal display apparatus comprising:

a liquid crystal panel including a pair of polarizers; and

a back light provided at a back side of said liquid crystal panel;

wherein said liquid crystal panel is an active matrix type liquid crystal panel, and has a characteristic of spectral transmittance required to satisfy the following equation, $x > y > z$, when a drive voltage is applied thereto so as to vary from a dark state to a light state, where:

"x" is a value of the transmittance in said liquid crystal panel at a wavelength which corresponds to one of 490nm and 500nm;

"y" is a value of the transmittance in said liquid crystal panel at a wavelength which corresponds to 545nm; and

"z" is a value of the transmittance in said liquid crystal panel at a wavelength which corresponds to 630nm.

31. (new) A liquid crystal display apparatus according to claim 30, wherein "x" is a value of the transmittance in said liquid crystal panel at a wavelength which corresponds to 490nm.

32. (new) A liquid crystal display apparatus according to claim 30, wherein "x" is a value of the transmittance in said liquid crystal panel at a wavelength which corresponds to 500nm.

33. (new) A liquid crystal display apparatus according to claim 30, wherein:
said pair of polarizers is arranged so as to sandwich a pair of substrates in said liquid crystal panel; and
a birefringence film is arranged between a polarizer and a substrate.

34. (new) A liquid crystal display apparatus according to claim 33, further comprising a plurality of electrodes provided on at least one of said pair of substrates in said liquid crystal panel to produce an electric field substantially in parallel with surfaces of said pair of substrates.